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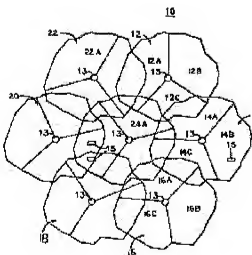
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(54) DEVICE AND METHOD FOR INTERFERENCE MATRIX RELATING TO ADAPTIVE CHANNEL ALLOCATION IN MOBILE TELEPHONE SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To optimize the allocation of a channel to a cell in a mobile phone system.

SOLUTION: A base station 13 having the highest possibility of communicating with a mobile unit 15 in each specific location is identified, and a list of assumed interference base stations about each identified base station 13 in each location in the system is collected. Transmission signal power having possibility of being received from each identified base station by the mobile unit 15 in each location is determined. The pieces of transmission signal power having possibility being from assumed interference base station in respective locations are compared for allocating a corresponding interference score showing the possibility and intensity of an interference between each identified base stations by



identifying a real interference base station. An interference matrix corresponding to a calculated base station interference score is determined, and then the base station interference is minimized by allocating a channel to the base station in compliance with the interference matrix. The system is monitored about a channel re-allocation request, and the base station interference is minimized by re-allocating the channel to an inheritance interference from a transfer interference in compliance with the interference matrix in compliance with the re-allocation request based on re-allocation determination.